

# STAFF SUMMARY SHEET

	TO	ACTION	SIGNATURE (Surname), GRADE AND DATE		TO	ACTION	SIGNATURE (Surname), GRADE AND DATE
1	DFM	sig	<i>Re: DFM, 29 Jul 13</i> Dr. Steve G. Green	6			
2	DFER	approve	<i>Kate 30 July 2013</i> <i>All disclaimers (below)</i>	7			
3	DFM	action	Lt Col John Martin	8			
4				9			
5				10			
SURNAME OF ACTION OFFICER AND GRADE			SYMBOL	PHONE		TYPIST'S INITIALS	SUSPENSE DATE
Martin, O-5			DFM	333-2499			
SUBJECT Clearance for Material for Public Release						USAFA-DF-PA- <i>417</i>	DATE 20130729

## SUMMARY

1. PURPOSE. To provide security and policy review on the document at Tab 1 prior to release to the public.

## 2. BACKGROUND.

Authors: Lt Col John Martin and Lt Col Brian Payne

Title: Executive Compensation: Is It Better To Be Lucky Than Good?

Circle one: Other: Research Brief

Description: Academy of Management Perspectives

Release Information:

Previous Clearance information: (If applicable)

Recommended Distribution Statement:

(Distribution A, Approved for public release, distribution unlimited.)

## 3. DISCUSSION.

## 4. VIEWS OF OTHERS.

5. RECOMMENDATION. Department Head or designee reviews as subject matter expert. DFER reviews for policy and security. Coordination indicates the document is suitable for public release. Suitability is based on the document being unclassified, not jeopardizing DoD interests, and accurately portraying official policy [Reference DoDD 5230.09]. Release is the decision of the originator (author). Compliance with AFI 35-102 is mandatory.

*John A. Martin*

JOHN A. MARTIN, Lt Col, USAF  
Professor of Management

Tab

1. Academy of Management Perspectives Research Brief

*"The views expressed in this article are those of the authors and not necessarily those of the U.S. Air Force Academy, the U.S. Air Force, the Department of Defense, or the U.S. Government."*

## EXECUTIVE COMPENSATION: IS IT BETTER TO BE LUCKY THAN GOOD?

John A. Martin  
Professor of Management  
United States Air Force Academy

Ph: 719-333-2499  
Email: john.martin@usafa.edu

Brian C. Payne  
Associate Professor of Management  
United States Air Force Academy

Ph: 719-333-7970  
Email: brian.payne@usafa.edu

## Research Questions

Why, exactly, are executives paid so much? Executive compensation has for years sparked interest from main street (citizens) to Wall Street (shareholders) to Capitol Hill (legislators) to Harvard Square (academia). Assertions of overpayment, fair payment, and more rarely, underpayment, abound. This is because executive compensation represents a significant financial commitment. Not only that, but compared to rank-and-file positions, executive compensation is tremendous. Take 2012 as an example. While the median annual wage for U.S. workers hovered around \$40,000 per year, median CEO pay was nearly 250 times that - almost \$10 million. And although average worker pay has barely increased for years, CEO pay is on the rise again following the recession that began in 2008.

The lack of consensus among scholars regarding the rationale for executive pay has only muddied the waters. Some argue that managerial skill determines pay; others contend that competitive labor market forces generate these pay scales; and, still others say pay simply results from the luck of working for the right firm in the right industry at the right time. To clarify this muddled picture, Jeffrey Brookman at Idaho State University and Paul Thistle at the University of Nevada at Las Vegas performed a “horse race” to determine whether skill, competitive forces, or luck best explains executive salaries. They ultimately conclude executives are compensated for their skills.

## Study Design and Method

In their research, Brookman and Thistle analyzed over 18,000 executives representing over 1,500 Standard and Poor’s firms from 1993 to 2008. To distinguish executives’ skills from other forces at work (e.g., firm size, high-paying firms, more lucrative industries, good years versus bad) they could only use executives who had moved between firms as well as executives who had worked with these executives who had also moved. By zeroing in on this interconnected group of executives, Brookman and Thistle creatively disentangled executive-unique abilities, firm-specific

attributes, and industry-unique characteristics to isolate the effects of skill, competition for talent, and luck on executives' pay.

A key element of this study involves how Brookman and Thistle measured executives' luck, their labor market opportunities, and their skill. First, since executive pay is often directly related to company performance - think stock options - they measured luck as the component of a company's performance explainable by factors that are unrelated to the executives' abilities. For instance, during the late 1990s many technology firms' stock prices (and the associated stock options) skyrocketed along with the market in general. The subsequent demise of these same firms indicates that the executives who were paid based on those inflated stock prices benefited from being at the right firm during the right market conditions – in short, luck.

Next, Brookman and Thistle implemented a commonly-used technique to evaluate executives' employment opportunities outside of their own firms. By comparing compensation for executives at other firms in the same industry and same approximate size, they could see how much of an executive's pay simply reflects the market demand for managerial expertise.

Finally, Brookman and Thistle measured executive skill using a statistical model that allowed them to narrow in on an individual executive's abilities by removing credit (or blame) for events beyond the executive's control, such as a booming or lagging industry, a business cycle expansion or recession, or a bull or bear stock market. Instead, by filtering out such uncontrollable events, Brookman and Thistle effectively isolated executives' difficult-to-measure characteristics such as innate ability, psychological traits, functional background, or willingness to embrace risky projects. To accurately implement this filter, they had to focus on the "interconnectedness" of executives. That is, the only way to truly discern an executive's unique abilities is to evaluate them in multiple settings and benchmark them against others.

A professional athlete analogy may help explain Brookman and Thistle's reasoning. Consider evaluating two baseball pitchers' skill levels. One pitches in the National League (NL) and

one in the American League (AL) in the era before NL and AL teams played each other. At that time, the AL had a “designated hitter” rule that made it harder for pitchers to perform. Although the AL pitcher might have more innate pitching ability, the rule might make his performance look worse than a peer in the other league. The only way to properly evaluate the pitchers’ relative quality is for them to face similar opposition – which incidentally became possible with the advent of interleague play in 1997.

The point of this sports digression is to explain why Brookman and Thistle ultimately could use only the executives who had moved firms and comparing them to all the other executives who had worked with this executive at any time during the study. By evaluating these mobile and associated executives’ performance across firms and across time, Brookman and Thistle could more accurately discover the true proportion of each individual’s compensation attributable to their unique individual skills.

Beyond the novel way they measured managerial skill, perhaps the most important aspect of this study is how the Brookman and Thistle differentiate their efforts from previous research. They evaluated the relative merits of luck, labor markets, and skill simultaneously. Moreover, they analyzed the entire top management team. Prior studies in this area have investigated the effects of luck, labor markets, and skill in isolation, all while focused on CEOs.

## **Key Findings**

Of the 18,000 executives and 1,500 firms Brookman and Thistle analyzed, the top management team members were on average 53 years old, 5% female, and 18% had the word “CEO” in their title. As in previous studies, luck and labor market opportunities were significant factors that helped explain managers’ compensation. In fact, these two factors explained just over 15% of the differences in compensation among executives. Interestingly, ignoring managerial skill, firm size (22%) and having CEO in one’s title (9%) better explained executive compensation than luck or labor markets.

After validating previous studies and concluding that luck and labor market opportunities both affect executive compensation, Brookman and Thistle conducted their so-called “horse race.” When managerial skill was added to the statistical analysis, it dominated the effects of luck and labor market opportunities by explaining a higher proportion of executive pay. Specifically, executives’ skills explained 39% of the variation in compensation among executives, more than double the combined explanatory power of labor markets (15%) and luck (0%). Additionally, when accounting for executives’ skills, the explanatory power of firm size (9%) and labor market opportunities (5%) diminished greatly.

Beyond simply attributing variation in executives’ pay to variation in their skills, this study found other factors that also influence executive compensation. Specifically, certain types of executives earned a salary premium. Those with CEO in their title earned salary premiums of around 39% compared to an identical person at an identical company without CEO in their title. Moreover, female executives earned less than male managers, executives at firms with more debt earned less, and older executives earned more.

### **Conclusions and Implications**

This study sheds light on the highly polarized and enigmatic topic of executive compensation. It will gratify some critics to know that executives are not compensated whimsically. They are not beneficiaries or victims of good or bad luck. In addition, Brookman and Thistle did not find that differences in pay from one executive to another results from a labor market auction for executive talent. As substantial economic research points out, auctions increase the chances of overpayment for an item (in this case managers), leading to the so-called “winner’s curse” in which the auction winner derives the least amount of value from the item they’ve won. Instead, this study concluded that executives are compensated for their skill. Such skills include inherent abilities, psychological characteristics, functional specialties, or risk-aversion levels.

While insightful about what drives *relative* compensation levels, one limitation of this study is that it does not further illuminate what drives *absolute* compensation levels. In other words, if every executive's salary were halved or doubled in this study, the results would be exactly the same as those presented. So while skill can explain the variation in the salary among executives, it does not necessarily explain why executives earn so much more than plumbers or college professors. It seems likely that the labor market – the supply of talented plumbers and college professors relative to demand – might play a bigger role than what this study shows. Also, while we learned from this study that every additional dollar in executive pay is primarily for additional managerial skill, it does not address whether that additional skill is worth the extra dollar.

Management researchers can help further refine the present study by unlocking the black box of what drives absolute compensation levels. One promising angle for researchers is a more specific examination of board structure and how it interacts with executive compensation. Are boards with higher proportions of outsiders more vigilant in terms of limiting executive compensation? More specifically, are lone-insider boards (boards with all outsiders except the CEO) more or less effective compared to other board types at setting executive compensation? This is an important question because the number of S&P 1,500 firms with lone-insider boards has tripled in the past decade. Another rich area to explore is to understand the process by which executive pay is set. Although we know that executive compensation is benchmarked with peer firms' compensation levels, that process has nothing to do with executive skill. How is it that boards know what their executives are worth? Is it through their interlocks at other firms?

In sum, given the focus on perceived excessive executive compensation over the past decades, this study provides some reassurance that executives' salaries are not a by-product of luck, nor are they primarily a result of the labor market for executive talent. Instead, this study implements a novel mechanism to isolate executives' unique skills and abilities. Using this measurement technique, Brookman and Thistle concluded executives' salaries differ based

primarily on their unique skills. Although critics might still contend pay is simply too high in the aggregate, based on the results it seems, at least, that the relative pay scales reflect the good and bad attributes executives bring to their organizations.

## References

Brookman, J.T. & Thistle, P.D. 2013. Managerial compensation: Luck, skill, or labor markets? *Journal of Corporate Finance*, 21: 252-268.

Median CEO pay rises to \$9.7 million in 2012. *USA Today*.

<http://www.usatoday.com/story/money/business/2013/05/26/ceo-pay-rises-in-2012/2350545/>. Accessed on July 13, 2013